

# LOCAL COMMUNITY PARTICIPATION IN NON-FARM ECONOMIC DEVELOPMENT: THE CASE OF TWO ORANG ASLI COMMUNITIES OF ROYAL BELUM STATE PARK, PERAK

**Khairul Hisyam Kamarudin, Noraini Omar Chong,  
Khamarrul Azahari Razak**

UTM Razak School of Engineering and Advanced Technology  
Universiti Teknologi Malaysia  
Kuala Lumpur Campus, Kuala Lumpur

Email: [khisyam.kl@utm.my](mailto:khisyam.kl@utm.my), [khamarrul.kl@utm.my](mailto:khamarrul.kl@utm.my), [norainichong@gmail.com](mailto:norainichong@gmail.com)

## ABSTRACT

*This paper discusses the concept of community participation in non-farm (NF) activities and the survey of local community via questionnaires, which were, carried out in two Orang Asli settlements in the Royal Belum State Park, Perak, Malaysia. 15 respondents have participated in the survey to identify the communities' current involvement in NF activities. Result shows all respondents are currently participate in NF activities inside Royal Belum State Park. Majority of respondents (87%) indicated NF activities as their primary occupation. The study also established a strong relationship between NF and income of households. Majority of respondents acknowledged the challenge imposed by depletion of forest resources and the growing contest for NF resources due to increasing number of population within the protected park. This paper concludes that non-farm (NF) activities played a significant role in shaping the livelihood of Orang Asli households of Kampung Sg. Kejar and Kampung Sg. Tiang, Royal Belum State Park. However, results from household survey and interview revealed the communities' current NF practices are still far from generating satisfactory income to sustain their livelihood and unable to bring the community out of poverty. A more environmental friendly development approach especially sustainable rural tourism project can be explored further as new type of rural NF activity for Orang Asli community in this protected park in the future.*

**KEYWORDS:** *community participation; non-farm; Orang Asli; Royal Belum State Park; sustainable local economic development*

## 1.0 INTRODUCTION

Rural transformation process in Malaysia could be the result of multi-dimensional changes towards diversification of rural economic activities particularly on the increases in non-farm (NF) activities, broadening of farm or land based activities and promotion of local distinctive products and quality services (Ngah *et al.*, 2013). The emergence of NF economic activities in rural areas are not entirely a new phenomenon as discussed by various scholars (see Coppard (2001); Mehta (2002); Ngah (2009); AIDMI (2012); Preston

and Ngah (2012); Kamarudin (2013) and among others, but limited research has so far been conducted in Malaysia to quantify their roles and contribution to rural livelihood and local economic development. According to Mehta (2002), rural non-farm economy may be defined as comprising all diverse economic activities that are not agricultural which generating income through waged work or self-employment activities. Rural NF activities can include manufacturing of agro-related products, offering quality services (tourism program), switching from cash crop farming to commodity trading or taking up some non-agricultural job to support household income (Ngah *et al.*, 2013; AIDMI, 2012). Rural NF activities has grown to become important sources of income especially among the rural poor (Kamarudin, 2014; Sebele, 2009).

Rural NF, as mentioned by Ngah *et al.* (2013) and Ellis (1999) is closely related with rural development through diversification of local economic base. Ellis (1999:2) briefly define rural livelihood diversification as the process by which rural households construct an increasingly diverse portfolio of activities and assets in order to survive and to improve their standard of living. AIDMI (2012) has strengthen the relationship between NF and rural development through generation of a wider opportunity and alternative for rural community in improving and transforming their livelihood. Among these potential opportunities are including: (1) Increasing the income of rural people considerably as non-farm wage is usually higher than agricultural wage; (2) Reducing climate dependency and therefore provides security against increasing uncertainty in climate; (3) Reduce tendency of the rural people to migrate to urban area, and (4) Responding to failures in factor markets; for instance, inability to access credit leads the households to take up supplementary activities to collect investment money for their main activity (AIDMI, 2012).

In this light, this study was initiated with aim to review the concept of community participation in NF activities and local development, followed by examination of the roles and contribution of NF activities in rural livelihood based on data from survey of two Orang Asli settlements in Royal Belum State Park, Malaysia. The roles and contribution of NF activities is examined in term of employment and income contribution to the rural households and its potential links and impact to the local economy.

## **2.0 REVIEW OF CONCEPT OF COMMUNITY PARTICIPATION IN NON-FARM ECONOMIC DEVELOPMENT**

Authors such as Stone and Stone (2011); Graci and Dodds (2010) and Sebele (2009) agreed that the development of rural economy through NF activities should include local communities as principal stakeholders and decision-makers. This is because local communities play significant roles in shaping the rural environment, utilising most of the rural resources for economic gain and are responsible for creating the local culture which becomes the main source of local distinctive products (Stone and Stone, 2011; Manyara and Jones (2007). Therefore, any attempt to exclude the “owners of their culture” could to some extent, result in serious negative impacts not only on the viability of NF socio-economic activities, but also on the livelihood of community as a whole (Kamarudin, 2013).

Aref (2011: 21) described community participation as “a process whereby the residents of a community are given a voice and a choice to participate in issues affecting their lives”.

The process in gathering people from several disciplines together with each of them participating by sharing ideas and knowledge, according to Arnstein (1969 in Okazaki 2008:511) could “expand the power redistribution, thereby enabling society to fairly redistribute benefits and costs”.

## 2.1 Types of community participation in NF economic development

From this study point of view, community participation can be viewed as a tool to solve major socio-economic problems of rural and marginalised community through active local participation and functional stakeholders involvement in NF activities – which will achieve more equal distribution of the economic and social benefits and will promote a more democratic decision-making among members of the community. Leksakundilok (2006 in Aref and Redzuan, 2008:937) has established a typology of community participation in NF economic development (rural tourism project in particular) with a modification on Arnstein’s model for ladder of citizen participation, and each type of participation is described in Table 1.

Table 1: Types of community participation in NF economic development

| Types             |  |
|-------------------|--|
| Self-mobilization | Local people may directly contact consumers and develop quality NF products and services by themselves. Some programs may be supported by NGOs that are not involved in the decision-making of the local community.  |
| Empowerment       | Empowerment is the highest rung of community participation, in which local people have control over all development without any external force or influence. The benefits are fully distributed in the community.  |
| Partnership       | Conciliation between developers and local people is developed in the participatory process. Local organizations elect the leaders to convey their opinion and negotiate with external developers. There are some degrees of local influence in the development process. The benefits may be distributed to the community in the form of collective benefits and jobs and income to the people. |
| Interaction       | People have greater involvement in this level. The rights of local people are recognized and accepted in practice at local level. NF projects are organized by community organization, however, receives limited support from government agencies.   |
| Consultation      | People are consulted in several ways, e.g. involved in community’s meeting or even public hearing. Developers may accept some contribution from the locals that benefit their projects, e.g. surveying, local transportation and goods.  |
| Informing         | People are told about NF project, which have been decided already, in the community. The developers (government agencies/private investors) run the projects without any listening to local people’s opinions.   |
| Manipulation      | NF economic activities are generally developed by some powerful individuals, or government, without any discussion with the people or community leaders. The benefits go to some elite persons; the lower classes may not get any benefits. This level applies to most conventional community NF areas   |

(Source: adopted from Kamarudin (2013); Leksakundilok (2006 in Aref and Redzuan, 2008:937))

From Table 1, the highest level of participation is when communities achieve self-mobilization, which allows community members to establish their own form of NF operations without assistance from other ventures, especially from government or foreign business bodies. In certain cases, however, especially when communities and their stakeholders feel that they are not capable or not ready to manage the potential risks from local NF projects, maintaining a certain level of partnership and empowerment, without

pushing themselves to the top of the participation ladder has gained more favour (Kamarudin, 2013; Aref, 2011).

While some authors agree that community participation can be a positive force towards achieving sustainable rural development (Kamarudin, 2013; Stone and Stone, 2011; Aref, 2011; Okazaki, 2008), others seemed to differ (Sebele, 2009; McKinlay, 2006; Blackstock, 2005; Njoh, 2002). A community and stakeholders' participation approach may, according to George (2004) and Njoh (2002), sometimes fail to identify the influences of elites within the communities in the participation process. For many areas such as in Africa (Sebele, 2009; Njoh, 2002), in Thailand (Rattanasuwongchai, 2001) and in Malaysia (Marzuki, 2008; Liu, 2006), NF economic projects in rural areas (tourism-based activities in this context of discussions) are driven by foreign ownership or the private sector or even by powerful and wealthy individuals within the community and do not contribute much to the community itself. Community and stakeholders' participation are only discussed in superficial terms but the primary goal is to make a profit for such commercial entities, and for a few powerful individuals and families within the community (Sebele, 2009; Yaman and Muhl, 2004). Indeed, it causes displacement, increased costs, economic leakages, loss of access to resources and socio-cultural disruption among the locals.

## 2.2 Strengths of community participation

Despite all the criticisms that have been described above, there is still a growing interest and awareness among social scientists to implement a community participation approach in planning and development of rural NF economic development (Kamarudin, 2013). Okazaki (2008:512), in summary, has listed four strengths of a community participation approach (Table 2).

Table 2: Strengths of community participation.

- |  |
|--|
| <ol style="list-style-type: none"> <li>1. <i>Local issues</i> – have a direct influence on the tourist experience: a backlash by the local's results in hostile behaviour towards tourists (Pearce, 1994). Thus, tourists environments should be created in harmony with the social climate, where residents will benefit from tourism and not become the victims (Wahab and Pigram, 1997).</li> <li>2. <i>Local assets</i> – the image of tourism is based on the assets of the local community, including not only the local people but also the natural environment, infrastructure, facilities and special events or festivals; therefore, the cooperation of the host community is essential to access and develop these assets appropriately (Murphy, 1995).</li> <li>3. <i>Local driving force</i> – public involvement functions as a driving force to protect the community's natural environment and culture as tourism products, while simultaneously encouraging greater tourism-related income (Felstead, 2000).</li> <li>4. <i>Tourism vulnerability</i> – because the tourism industry is sensitive both to internal and external forces, many tourism development plans are often only partially implemented or not at all (Bovy, 1982). Moreover, even those that are fully implemented are not always sustainable. Thus, to increase the feasibility and longevity of projects, all plans should be linked with the overall socioeconomic development of the community.</li> </ol> |
|--|

(Source: adapted from Okazaki (2008: 512))

To encourage a greater level of participation among local communities and their stakeholders in NF projects planning and decision-making process, Smith (1984 in George, 2004: 58) presents four prerequisites: 1) the legal right and opportunity to participate; 2) access to information; 3) provision of enough resources for people or groups to get involved; and 4) genuinely public – broad rather than selected (sometimes elite)

involvement. Besides factors which directly related with locals, Yaman and Muhd (2004) have suggested that rural NF projects planning and development must be strengthened through education for local host populations, industry and visitors as well as respect for the quality of natural environment, resources and sustainable use of energy and investment in a more cost efficient and eco-friendly modes of transport.

#### *Motivations and barriers for taking part in NF economic development*

Dunn (2007) in NF activity (i.e. community-based tourism research project) in Thailand, Kamarudin (2013) in sustainable community-based rural tourism program in Malaysia and Sebele (2009) in community-based rural tourism research project in Botswana have identified that one of the many motivations to get involved in rural NF economic development project is because the members of a community wanted to help with conservation of the environment and improve their management skills. They were also interested in meeting new people both in their community and outside their community. Some members of the community, especially women, stated their motivations were driven by interest to improve their skills mainly in language for communication (Dunn, 2007). Another motivating factor is earning a more stable and continuous income from local NF activities, especially when their NF jobs offer flexibility in terms of working hours which enables them to participate in other NF activities even on part-time and seasonal basis (Kamarudin, 2013; Logar, 2009; Dunn, 2007).

Meanwhile, some potential barriers related with community and stakeholders' participation in planning and management of local NF economic development projects that had been identified based on review of the literature and by examine previous research works by Dukeshire and Thurlow (2002), Krank *et al.* (2010), Stone and Stone (2011) and Kamarudin (2013) are including:

- 1) *Lack of understanding*: - Having a sound understanding on how a policy-making process is being carried out has become one of the vital requirement for any communities if they intend to venture into NF economic development (Stone and Stone, 2011; Dukeshire and Thurlow, 2002). Such understanding can help individuals and community-based organizations to decide whether they should involve in trying to develop or change a policy and, if so, how to get the best out of it. Unfortunately, the reality of policy-making process is far more complicated since the process might involve manifold procedures (Dukeshire and Thurlow, 2002).
- 2) *Lack of resources*: - Access to resources is one of the main factors to encourage participation by local communities in local NF projects (Kamarudin, 2013; Stone and Stone, 2011). These resources include adequate funding, government training programs, education, leadership skills and volunteers to support NF initiatives (Stone and Stone, 2011; Strzelecka and Wicks, 2010). In many cases such as in Thailand (Dunn, 2007; Rattanasuwongchai, 2001) and in Botswana (Stone and Stone, 2011; Sebele, 2009), rural communities may tend to lack one or more of these resources, creating situation which could limit local communities' ability to actively participate and influence the NF development process.
- 3) *Lack to access to information*: - Limited access to information is another factor, which affects the participation of local people and relevant stakeholders in NF economic development (Stone and Stone, 2011; Dukeshire and Thurlow, 2002). Hence, it is important to improve local access to information by providing and upgrading the information and communication technology (ICT) for rural dwellers (Nguru, 2010).

- 4) *Absence of rural representation in decision-making process:* - Local representation in the decision-making process is a vital component for NF planning and development projects (Kamarudin, 2013; Graci and Dodds, 2010). Unfortunately, in certain cases such as in community tourism projects in Khama Rhino Sanctuary Trust (KRST) in Botswana (Stone and Stone, 2011; Sebele, 2009) and in Leeled, Thailand (Dunn, 2007), local community members, including specific groups (i.e. women) within the community and among other rural stakeholder were only included at the initial stage of tourism development. Their roles, knowledge, capabilities and past contribution were overlooked as the project progresses. Without significant participation of these stakeholders in decision-making, it is very difficult to get collective decisions and firm support from local people in carrying out local NF projects, especially for the long term (Bernardo, 2011; Graci and Dodds, 2010).
- 5) *The relationship between rural communities and rural government:* - The shift in the rural NF economic development approach from top-down to bottom-up is limited by the community perception that governments do not understand rural issues (Dunn, 2007). It is believed, government officer often impose policies or development programmes which not only fail to trickle down the benefits to local people or, even worse, the implementation of policies or development programmes may negatively affect rural community as a whole (Dunn, 2007; Dukeshire and Thurlow, 2002). In certain situations, the attitudes and actions of government officers who perceive rural people and their stakeholder as 'non experts' unable to suggest better policy outcomes and planning initiatives, have created barriers to working collaboratively in improving participation level and sustainability of rural communities (Graci and Dodds, 2010; Dunn, 2007).
- 6) *Time and policy timeline restrictions:* - The planning and development of tourism policies often requires certain timeline to be followed as the length of the processes might consume a lot of resources especially financial burden, also affecting commitment from all parties to get involved. Stone and Stone (2011) describe this issue by pointed out that the government or other investors for NF projects often allow such limited time for public consultation with the purpose for immediate actions on policy formulation process. On the other hand, Dukeshire and Thurlow (2002) indicated that the policy-making process also might take a very long time, creating pressure for the resources (cost increases, loss patient among parties involved) and could end up with frustration. All these issues have created pressure and barriers for effective participation by local community and other stakeholders.

### **3.0 CASE STUDY OF TWO COMMUNITIES AND STUDY APPROACH**

The study has selected two *Orang Asli* settlements as case study subjects namely Kampung Sungai Kejar and Kampung Sungai Tiang of Royal Belum state park (Figure 1). There was a lack of current information about these two villages, mainly due to the inconsistently updating community records, valid written document, and publications to date on the communities and their settlements. However, some information was gathered during interviews with the chief of villages and the visit to JAKOA Gerik office (Razak *et al.*, 2015) (Table 3).

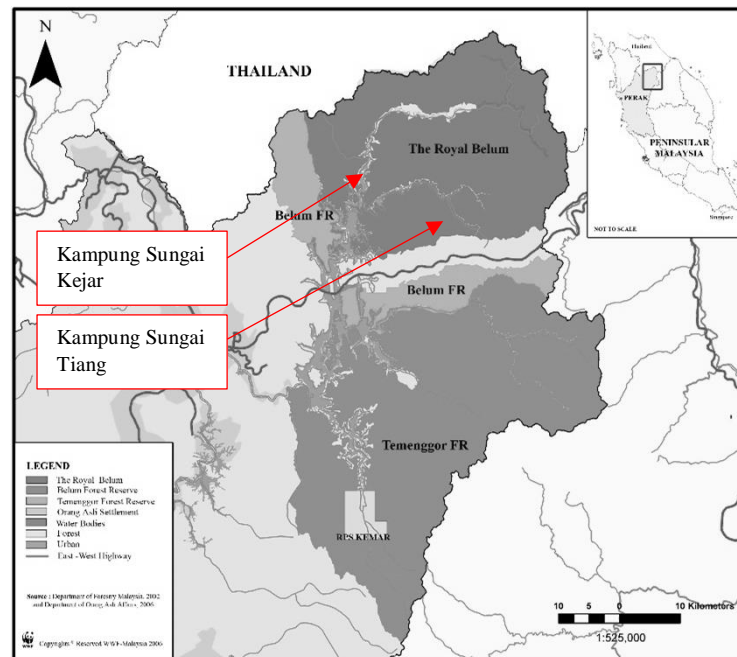


Figure 1: Locations of the study areas  
(Source: adopted from WWF-Malaysia ([www.wwf.org.my](http://www.wwf.org.my)))

Table 3: Profile of two villages

| Village (or<br><i>Kampung</i> ) | Population |        |          | Number of<br>families |       |          |       |
|---------------------------------|------------|--------|----------|-----------------------|-------|----------|-------|
|                                 | Male       | Female | Total    |                       |       |          |       |
| Sungai Kejar                    | 213        | 184    | 397      | 96                    |       |          |       |
| Sungai Tiang                    | 191        | 218    | 409      | 83                    |       |          |       |
|                                 |            |        |          |                       |       |          |       |
| Village (or<br><i>Kampung</i> ) | Sub Ethnic |        | Religion |                       |       |          | TOTAL |
|                                 | Jahai      | Temiar | Islam    | Christian             | Bahai | Animisme |       |
| Sungai Kejar                    | 397        | -      | -        | -                     | -     | 397      | 397   |
| Sungai Tiang                    | 409        | -      | 49       | 47                    | 73    | 240      | 409   |

(Source: adopted from JAKOA Gerik (2014))

Primary data and information were systematically gathered using both quantitative (via questionnaire-guided surveys) and qualitative approaches (via unstructured interviews and field observations) on 9<sup>th</sup> until 11<sup>th</sup> September 2014 (Figure 2). Meanwhile, secondary data and information were gathered from reviews of village census books and unpublished census records from the Department of Orang Asli Development (Jabatan Kemajuan Orang Asli, JAKOA) Gerik.

Fifteen (15) respondents (head of households) have agreed to participate in the questionnaire-guided surveys i.e. seven respondents from Kampung Sungai Kejar and eight respondents from Kampung Sungai Tiang. Two different approaches were adopted when conducting the survey on the local communities, and decisions were made based on different scenarios faced during the visit to each village. A meeting was held with the respondents in the village community hall (*Balai Sewang*), Kampung Sungai Kejar (Figure 2). The unstructured interview sessions were done for respondents from Kampung Sungai

Tiang, as it was impossible to meet respondents collectively during the time allocated for the field survey.



Figure 2: Preliminary site visit and interview with local residents at  
Kampung Sungai Kejar  
Photos: Khamarrul Azahari Razak (2015)

The Statistical Package for Social Sciences (SPSS) software was aided in the data processing and data analyses. The simple frequency and comparative statistical analysis were adopted to differentiate the variation in term of the contribution of NF activities the relationships between different variables including respondents' main reasons for participating in non-farm activities and pertinent issue related to the non-farm activities in different settlements/villages.

#### **4.0 RESULTS AND DISCUSSIONS**

This section presents results from data analyses and field observation including profile of respondents, nature of communities' involvement in non-farm (NF) activities, contribution of NF activities to household income and livelihood, and emerging issues and challenges of local NF activities.



Table 4: Profile of respondents and their status of involvement in NF activities

| Information                              | Frequency<br>(n=15) | %   | Information                    | Frequency<br>(n=15) | %   |
|--|---------------------|-----|--------------------------------|---------------------|-----|
| Number of respondents                    |                     |     | Involvement in NF              |                     |     |
| • Kg. Sg. Kejar                          | 7                   | 47  | • Yes                          | 15                  | 100 |
| • Kg. Sg. Tiang                          | 8                   | 53  | • No                           | 0                   | 0   |
| Gender                                   |                     |     | Involvement as a full time job |                     |     |
| • Male                                   | 15                  | 100 | • Yes                          | 13                  | 87  |
| • Female                                 | 0                   | 0   | • No                           | 2                   | 13  |
| Age category                             |                     |     | Involvement as a part time job |                     |     |
| • Below 17 year old (y.o.)               | 1                   | 7   | • Yes                          | 2                   | 13  |
| • 18-40 y.o.                             | 10                  | 66  | • No                           | 13                  | 87  |
| • 41-50 y.o.                             | 3                   | 20  |                                |                     |     |
| • Above 51 y.o.                          | 1                   | 7   |                                |                     |     |
| Marital status                           |                     |     | Involvement as a seasonal job  |                     |     |
| • Married                                | 13                  | 87  | • Yes                          | 9                   | 60  |
| • Widower                                | 2                   | 13  | • No                           | 6                   | 40  |
| Education level                          |                     |     | Location of NF activities      |                     |     |
| • No formal education                    | 9                   | 60  | • Inside Royal Belum           | 15                  | 100 |
| • Adult school (sekolah dewasa) 3 months | 6                   | 40  | • Outside Royal Belum          | 0                   | 0   |

(Source: Research fieldwork in 2015)

Table 5: Respondents' involvement in non-farm (NF) activities

| Information   | Frequency<br>(n=15) | Percentage<br>(%) |
|---|---------------------|-------------------|
| Types of NF activity                                    |                     |                   |
| • Sandalwood / Kayu gaharu (full time every month)      | 13                  | 87                |
| • Honey gatherer (Madu Tualang) (seasonal, one a year)  | 15                  | 100               |
| • Honey gatherer (Madu Kelulut) (part time every month) | 13                  | 87                |
| • Fishing (part time every month)                       | 13                  | 87                |
| Frequency of activity per month                         |                     |                   |
| • Every week  | 13                  | 87                |
| • Not related   | 2                   | 13                |
| Frequency of activity per year                          |                     |                   |
| • Every month   | 5                   | 33                |
| • Every 3 months  | 8                   | 53                |
| • Every 6 months  | 1                   | 7                 |
| • Once per year   | 1                   | 7                 |
| Involvement of family members in NF                     |                     |                   |
| • Yes (brother)   | 1                   | 7                 |
| • No  | 14                  | 93                |

(Source: Research fieldwork in 2015)

As presented in Table 4, all respondents are currently participate in non-farming activities which taken place inside Royal Belum State Park. Majority of respondents (87%) indicates that non-farm activities as their primary job (on full-time basis), followed by as seasonal activities (60%) and as a part time job (13%).

#### 4.1 Main reasons for participating in NF activities

As presented in Figure 3, majority of respondents (93%) mentioned “the lack of option” (especially in local farming or other land-based economic activities) as one of the main reasons for their involvement in non-farm activity. Almost 87% of respondents mentioned non-farm activities as their main source of income, followed by the marketability of local non-farm products (40%). The lowest three answers given by respondents were “as supporting income”, “more flexibility in job” and “possess relevant skills to carry out non-farm job” with 27% of selection respectively.

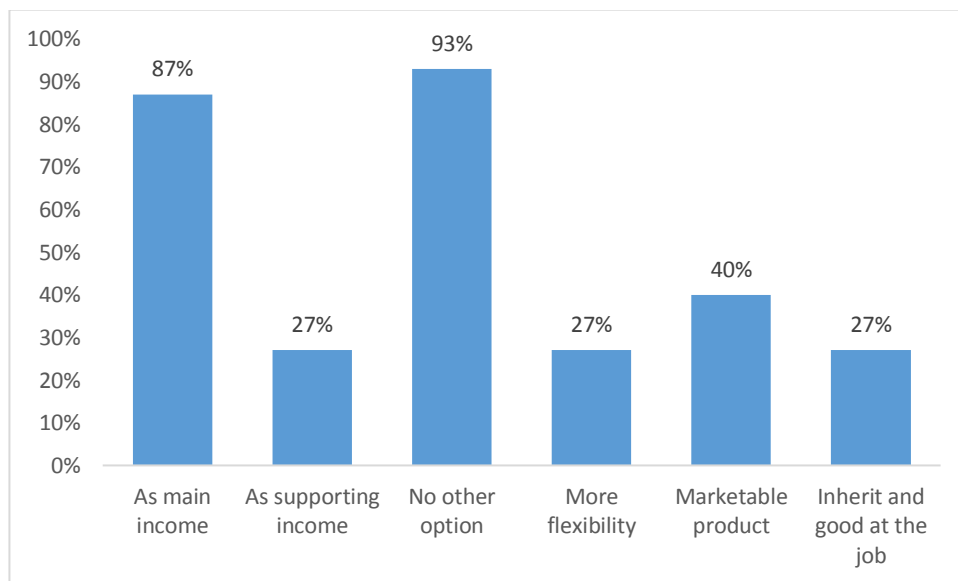


Figure 3: Respondents' main reasons for participating in non-farm activities (n=15)  
(Source: Research fieldwork in 2015)

Table 6: Nature of NF works in the study areas (n=15)

|       |       | Working in NF as in group/team |         |               |                    |
|-------|-------|--------------------------------|---------|---------------|--------------------|
|       |       | Frequency                      | Percent | Valid Percent | Cumulative Percent |
| Valid | No    | 1                              | 6.7     | 6.7           | 6.7                |
|       | Yes   | 14                             | 93.3    | 93.3          | 100.0              |
|       | Total | 15                             | 100.0   | 100.0         |                    |

(Source: Research fieldwork in 2015)

As presented in Table 6, majority of respondents (93%) admitted that they were usually working in group when undergone NF-related works. These includes going to the forest to extract wild honey, gather rattan, *gaharu*, wild herbs and fishing. Only one respondent (7%) mentioned he did not work in group due to illness or physical barrier. The most preferable answer given by respondents is that working in groups would increase chances for them in getting more output (60%), followed by safety reason (26%). The remaining two respondents did not specify their answer (Figure 4).

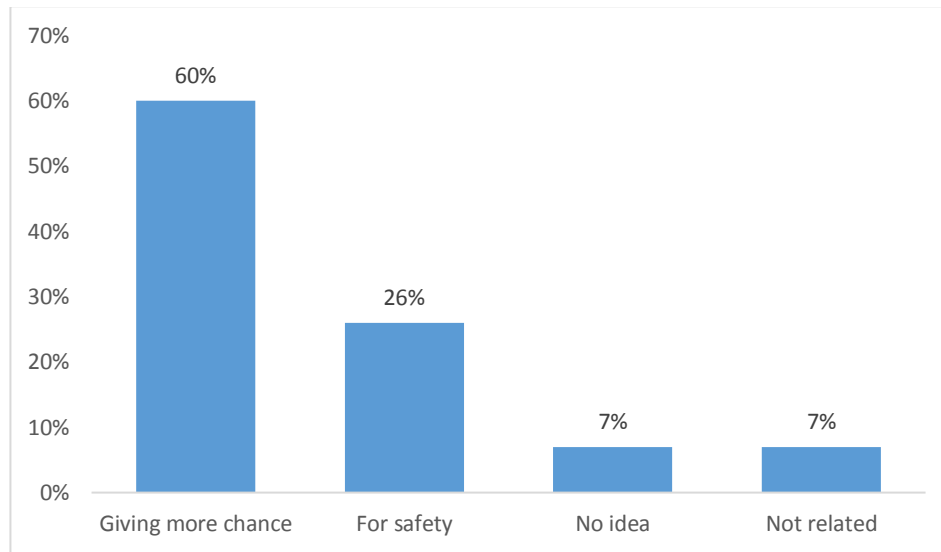


Figure 4: Respondents' main reasons for working in groups in non-farm activities (n=15)  
(Source: Research fieldwork in 2015)

Regarding the element of income generated through NF activities, the survey managed to obtain an income figure from the selling of sandalwood (gaharu) only (Table 7). As for other types of NF such as honey extraction (gaharu and kelulut), selling rattan, wild herbs and fishing, the income figure (or even estimation) was not given by respondents due to seasonality of the activities and often conducted on a part time basis and produced a lower output. Currently, all NF products from Sg. Kejar and Sg. Tiang will be sold at the Banding Island jetty (or known as Mat Shah Jetty by the locals) where they will receive money in cash. Majority of respondents also agree since they work as a group, the income generated from selling of forest products will be divided equally among members of the group (Research fieldwork in 2015).

Table 7: Average income from NF activity (n=15)  
Income from Sandalwood/Gaharu

|                   | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------|-----------|---------|---------------|--------------------|
| Valid Not related | 1         | 6.7     | 6.7           | 6.7                |
| <RM10/day         | 3         | 20.0    | 20.0          | 26.7               |
| RM15/day          | 7         | 46.7    | 46.7          | 73.3               |
| RM30/day          | 4         | 26.7    | 26.7          | 100.0              |
| Total             | 15        | 100.0   | 100.0         |                    |

(Source: Research fieldwork in 2015)

Due to high transportation cost, respondents at both villages have to ensure that potential income from the sale of their NF products would cover the necessary costs and still have extra cash for purchasing food including rice, sugar, cooking oil, cigarette and propane tank for cooking. Based on interview with the Batin Sain of Sg. Kejar, local residents normally have to allocate approximately RM180 as petrol cost (for return trip by boat). Similar feedback on petrol cost also obtained for residents of Sg. Tiang (Research fieldwork in 2015).

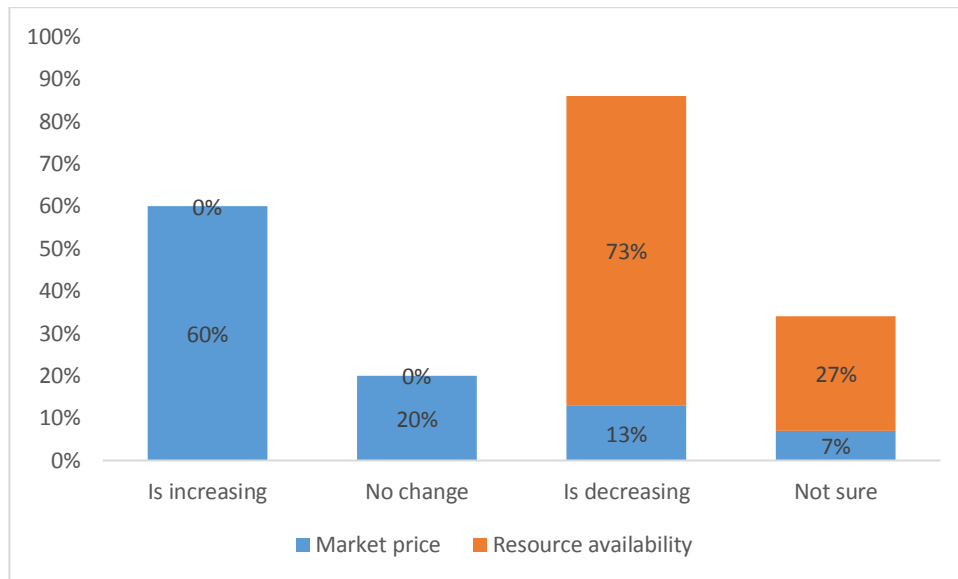


Figure 5: Perceptions on prospect of NF activities – market price and resources availability (n=15)  
(Source: Research fieldwork in 2015)

With regards to respondents' perceptions prospect – i.e. pricing for NF products, more than 60% agreed that the market price is increasing as compared to 20% which feeling the price have not change much over the years. Only 13% of respondents considering the market price is decreasing and the remaining 7% stated they are not sure about the price (Figure 5). The result is very closely related to the second question i.e. prospect/status resources available for NF products. The survey clearly indicated that majority of respondents (73%) considering the resources related to NF activities is in decreasing mode, followed by the remaining 27% mentioned that they are not sure about the situation. None of the respondents indicate local resources related to NF in an increasing state nor in stable supply.

#### 4.2 Potential challenges of NF activities

Based on Figure 6, there are four major issues/challenges has been identified with regards to NF activities in two villages. Resource depletion is regarded as the most pressing issue by 38% of respondents, followed by the issue of illegal poachers/intruders (32%), issue of seasonality for some of NF activities (22%) and issue related to lack of capital for funding the NF works (8%).

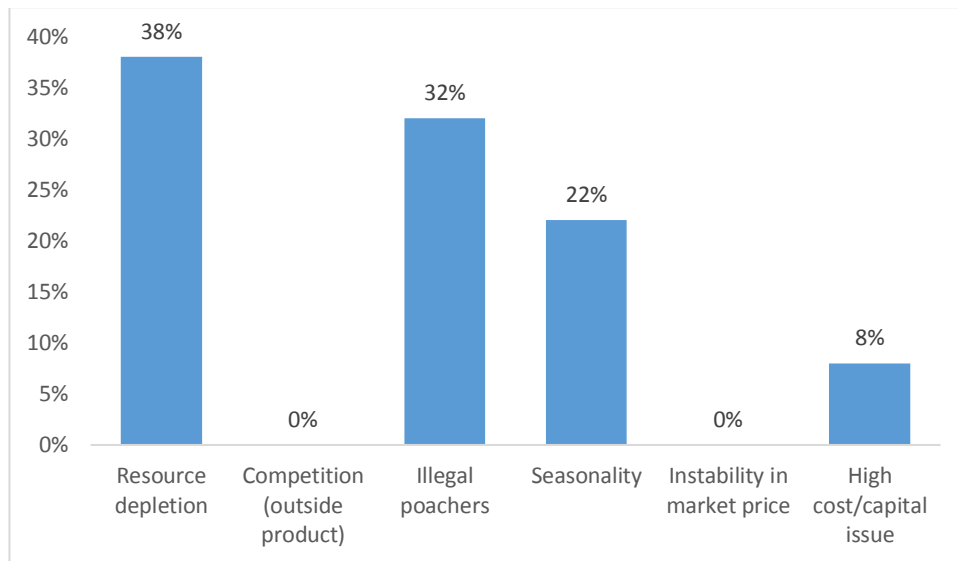


Figure 6: Issue and challenges related to NF activities (n=15)  
(Source: Research fieldwork in 2015)

## 5.0 CONCLUSION

This study demonstrated that non-farm (NF) activities played a significant role in shaping the livelihood of Orang Asli households of Kampung Sg. Kejar and Kampung Sg. Tiang, Royal Belum State Park. Results from household survey and interview revealed all respondents are involved in non-farm activities, mostly related with extracting and selling forest products including sandalwood (gaharu), rattan, wild honey (tualang and kelulut), medicinal plants and fishing. Survey of local community also identified reasons for involvement in NF activities among respondents. These reasons including lack of option which in turn forced local people to work in NF activities closely related to exploitation of surrounding resources for a living. Other NF activities especially related to small and medium enterprises (SMEs), tourism and tourism-related and in local services are not well established in the study area. The community involvement in NF activities, undoubtedly generated local jobs and income. However, the current data shown level of household income is far from satisfactory and able to bring them out of poverty.

Some interesting findings also gathered by this study particularly on respondents' perception on market price for NF products and on availability of NF resources in Royal Belum State Park. Data analyses indicated majority of respondents agreed that the price for NF products has increase over the years. Similarly, they also admitted that local resources harvested as NF products have been decrease over the years, and they have to travel further into the forest to search for gaharu, rattan, wild honey and other products. It is recommended by this study that the "new NF and NF-related activities" can be introduced in near future to reduce community dependency on exploitation of natural resources hence reducing the pressure on valuable resources of Royal Belum. New NF activities particularly sustainable tourism development (Eco-Culture Tourism) and tourism-related activities (SMEs and tourism services) can be promoted for uplift quality of live among Orang Asli community of Royal Belum State Park.

## REFERENCES

- All India Disaster Mitigation Institute (AIDMI) (2012). *Towards Climate Smart Disaster Risk Reduction*. Issue No. 88, November 2012. Available online at: [http://www.preventionweb.net/files/29791\\_88southasiadisasterstowardsclimates.pdf](http://www.preventionweb.net/files/29791_88southasiadisasterstowardsclimates.pdf) (Accessed on 23 December 2016).
- Aref, F. (2011). Sense of community and participation for tourism development. *Life Science Journal*, 8(1), 20-25.
- Aref, F., & Ma'rof, R. (2008). Barriers to community participation toward tourism development in Shiraz, Iran. *Pakistan Journal of Social Sciences*, 5(9), 936-940.
- Bernardo, J. C. (2011). Framework for the Development of Community-based Rural Tourism and Successful Models of CBRT in Asia. Paper presented at the *Conference on Planning and Developing Community-Based Rural Tourism*. Philippines, 12-14 January.
- Blackstock, K. (2005). A critical look at community based tourism. *Community Development Journal*, 40(1), 39-49.
- Coppard, D. (2001). *The rural non-farm economy in India: A review of the literature*. Natural Resource Institute, Department for International Development (DFID), World Bank, NRI Report, 2662.
- Dodds, R., Graci, S. R., & Holmes, M. (2010). Does the tourist care? A comparison of tourists in Koh Phi Phi, Thailand and Gili Trawangan, Indonesia. *Journal of Sustainable Tourism*, 18(2), 207-222.
- Dukeshire, S., & Thurlow, J. (2002). Challenges and Barriers to community participation in Policy Development. *Rural Communities Impacting Policy Project*. Nova Scotia.
- Dunn, S. F. (2007). *Toward empowerment: Women and community-based tourism in Thailand*. University of Oregon.
- Ellis, F. (1999). Rural livelihood diversity in developing countries: evidence and policy implications (Natural Resource Perspectives 40, pp. 10). *London: Overseas Development Institute*.
- George, E. W. (2004). *Commodifying local culture for tourism development: The case of one rural community in Atlantic Canada*. University of Guelph.
- Kamarudin, K. H. (2013). Revitalization of Local Socio-Culture Through Community Based Rural Tourism (CBRT): Lesson from Three Communities in the East Cost of Malaysia. *Terengganu International Tourism Conference (TITC2013)*, 23-25 August, 2013, Permai Hotel Terengganu.

- Kamarudin, K., Ngah, I., Razak, K., Ibrahim, M. S., & Harun, A. (2014). Resilience in a community: A story of Orang Asli of Royal Belum–Temengor Forest Complex, Perak. Paper presented at the *5<sup>th</sup> Rural Research and Planning Group International Conference and Field Study in Malaysia 2014*, 26-28 August 2014, INFRA Bangi, Selangor.
- Kamarudin, K. H., Ngah, I., Wahid, S. N. A., & Razak, K. A. (2015). Readiness of Orang Asli Communities in Royal Belum-Temengor Forest Complex, Perak towards Sustainable Eco-Culture Tourism (ECT) Programme. *Journal of Human Capital Development*, 8(1), 59-72.
- Krank, S., Wallbaum, H. and Gret-Regamey, A. (2010). Constraints to Implementation of Sustainability Indicators Systems in Five Asian Cities. *Local Environment*, 15(8): 731-742.
- Liu, A. (2006). Tourism in rural areas: Kedah, Malaysia. *Tourism Management*, 27(5), 878-889.
- Logar, I. (2009). Sustainable tourism management in Crikvenica, Croatia: An assessment of policy instruments. *Tourism Management*, 31(1), 125-135.
- Manyara, G., & Jones, E. (2007). Community-based tourism enterprises development in Kenya: An exploration of their potential as avenues of poverty reduction. *Journal of Sustainable Tourism*, 15(6), 628-644.
- Marzuki, A. (2008). Decision making and community participation: A case study of the tourism industry in Langkawi. *Turizam: znanstveno-stručni časopis*, 56(3), 227-241.
- McKinlay, P. (2006). The challenge of democratic participation in the community development process. *Community Development Journal*, 41(4), 492-505.
- Mehta, G. (2002). *Non-farm economy and rural development*. Giri Institute of Development Studies. Lucky Now.
- Ngah, I. (2009). Rural Development in Malaysia, Chapter 2 in Ishak Yusof ed. *Malaysia's Economy, Past, Present and Future*: Kuala Lumpur: Malaysian Strategic Research Centre.
- Ngah, I., Saad, H., & Kamarudin, K. (2013). Socio Economic Transformation of Rice Cultivation Area in Malaysia: A Case of Two Villages in Sabak Bernam. Paper presented at the *Rural Research & Planning Group (RRPG) 4<sup>th</sup> International Meeting & Workshop 2013*, Institut Teknologi Bandung Indonesia, 9-10 September 2013.
- Nguru, A. I. (2010). *Resilience in tourism business: A case study of Cherating Lama Village, Pahang*. Skudai: unpublished Master's Tourism Planning thesis, Universiti Teknologi Malaysia.

- Njoh, A. J. (2002). Barriers to community participation in development planning: lessons from the Mutengene (Cameroon) self-help water project. *Community Development Journal*, 37(3), 233-248.
- Okazaki, E. (2008). A community-based tourism model: Its conception and use. *Journal of Sustainable Tourism*, 16(5), 511-529.
- Preston, D., & Ngah, I. (2012). Interpreting rural change in Malaysia. *Singapore Journal of Tropical Geography*, 33(3), 351-364.
- Rattanasuwongchai, N. (2001). Rural tourism-the impact on rural communities. II. Thailand. *Extension Bulletin-ASPAC, Food & Fertilizer Technology Center*(458), 4-16.
- Razak, K. A., Che Hasan, R., Kamarudin, K. H., Haron, H., Sarip, S., Dziyauddin, R. A. and Fathi, S. (2015). TRANSROYAL: Multi-Inter-Trans-Disciplinary Geo-Biosphere Research Initiatives in the Royal Belum and Temengor Forest Complex (RBTFC) Gerik Perak. *International Conference on Sustainability Initiatives (ICSI) 2015 in conjunction with 8<sup>th</sup> ASEAN Environmental Engineering Conference (AEEC)*, Kuala Lumpur, Malaysia, 24-25 August 2015.
- Sebele, L. S. (2009). Community-based tourism ventures, benefits and challenges: Khama rhino sanctuary trust, central district, Botswana. *Tourism Management*, 31(1), 136-146.
- Stone, L. S., & Stone, T. M. (2011). Community-based tourism enterprises: challenges and prospects for community participation; Khama Rhino Sanctuary Trust, Botswana. *Journal of Sustainable Tourism*, 19(1), 97-114.
- Strzelecka, M., & Wicks, B. E. (2010). Engaging residents in planning for sustainable rural-nature tourism in post-communist Poland. *Community Development*, 41(3), 370-384.
- Yaman, A. R., & Mohd, A. (2004). Community-based ecotourism: a new proposition for sustainable development and environmental conservation in Malaysia. *Journal of Applied Sciences*, 4(4), 583-589.